## **CLAIM SUMMARY DOCUMENT:**

1. (Currently Amended) A system for purifying a flow of exhaust gases of diesel or gasoline multicylinder engines containing, on average, an excess of oxygen, the system comprising operational units including:

an a single oxidation catalyst, a particle separator; and an  $NO_x$  adsorption catalyst, the  $NO_x$  adsorption catalyst located upstream or at the same location as the sole oxidation catalyst, with respect to the flow of exhaust gases, whereby the system reduces the amounts of hydrocarbons, carbon monoxide, nitrogen oxides and particles present in the exhaust gas.

Claim 2 (Canceled).

- 3. (Previously Amended) The system of Claim 1, wherein the order of the operational units, in flow direction of the exhaust gas, is as follows: the  $NO_x$  adsorption catalyst, the particle separator, and the oxidation catalyst.
- 4. (Previously Amended) The system of Claim 1, wherein the order of the operational units, in flow direction of the exhaust gas, is as follows: the NO<sub>x</sub> adsorption catalyst, the oxidation catalyst, and the particle separator.

- 5. (Currently Amended) The system of Claim 1, <u>further comprising</u> an exhaust gas discharge line of each cylinder of the engine is connected to a connecting channel, wherein said operational units are arranged.
- 6. (Currently Amended) The system of Claim 1, wherein an the NO<sub>x</sub> adsorption catalyst is arranged in an exhaust gas discharge line of each cylinder of the engine, said discharge lines being connected to a connecting channel wherein said oxidation catalyst and said particle separator are arranged.
- 7. (Previously Amended) The system of Claim 1, wherein the system includes two or more partial systems in parallel, each of the partial systems comprising said operational units.
- 8. (Previously Amended) The system of Claim 1, wherein the  $NO_x$  adsorption catalyst and/or oxidation catalyst are disposed in the same structure with the particle separator.
- 9. (Previously Amended) The system of Claim 1, wherein the oxidation catalyst contains platinum and/or palladium catalytic metal(s).

10. (Currently Amended) A The system of claim 1, wherein the exhaust gases contain at least one of nitrates and particles for purifying exhaust gases of diesel or gasoline multicylinder engines containing, on average, an excess of oxygen, the system comprising: and wherein

the  $NO_x$  adsorption catalysts is arranged in each an exhaust gas discharge line of each cylinder, or in each of the exhaust gas discharge lines of two cylinders.

11. (Currently Amended) The system of Claim 10 wherein the NO<sub>x</sub> adsorption catalyst is capable of regeneration, and wherein, regeneration of the NO<sub>x</sub> adsorption catalyst sulfates, reduction of nitrates, and burning of particles is accomplished by periodically using a lean mixture and a rich mixture.

- 12. (Currently Amended) The system of Claim 11, wherein a ratio defined by duration of the lean phase mixture to duration of the rich phase mixture is more than 3.
- 13. (Previously Amended) The system of Claim 10, wherein said NO<sub>x</sub> adsorption catalyst contains catalytic metal platinum and/or rhodium and at least one of the following elements: Ba, Sr, La, Y, Ce, Zr.

Claims 14-19 (Withdrawn).

20. (Previously Added) The system of claim 12, wherein the ratio is more than 10.

21. (Previously Added) The system of claim 13, wherein the  $NO_x$  catalyst further contains at least one of the following elements: Li, Na, K, Rb, Cg, Be, Mg, and Ca.

## Claims 22-26 (Withdrawn).

27. (New) The system of claim 1, wherein the  $NO_x$  adsorption catalyst and the particle separator are disposed at the same location.



- 28. (New) The system of claim 1, wherein the oxidation catalyst and the particle separator are disposed at the same location.
- 29. (New) The system of claim 1, wherein the oxidation catalyst also reduces nitrogen oxides.